

IN THE CLAIMS:

Please cancel Claims 69, 72, 76 and 79 without prejudice.

Please amend Claims 66, 67, 73, 74, 75 and 80 as follows:

66. (Amended) An outline forming apparatus comprising:

storing means for storing pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a [path] curve of second degree or more on which the first outline point moves to a second outline point of a pattern having a second weight;

input means for inputting weight [information] of a pattern;

[moving means for moving the first outline point based on the weight information input by said input means and the vector information stored in said storing means to obtain a position of a third outline point;] and

[generating means for generating outline data corresponding to a pattern having a weight indicated by the input weight information based on coordinate data of the third outline point]

converting means for converting the coordinate data corresponding to the first outline point into coordinate

~~Sub X1~~
~~Sub X2~~
~~Cold~~

data corresponding to a third outline point of a pattern
having the input weight based on the vector information.

67. (Amended) The outline forming apparatus according to Claim 66, further comprising output means for outputting a pattern having [a weight corresponding to the input weight information] the input weight, based on [the outline data generated by said generating means] coordinate data corresponding to a third outline point obtained by said converting means.

~~Sub X1~~
~~Sub X2~~
~~Cold~~
~~Cold~~

73. (Amended) An outline forming method for an apparatus which stores pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a [path] curve of second degree or more on which the first outline point moves to a second outline point of a pattern having a second weight, said method comprising the steps of:

 inputting weight [information] of a pattern;
 [moving the first outline point based on the weight information input in said input step and the stored vector information to obtain a position of a third outline point;] and

 [generating outline data corresponding to a pattern having a weight indicated by the input weight

~~information based on coordinate data of the third outline point]~~

~~converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector information.~~

SUB X2
C2
Cancelled

74. (Amended) The outline forming method according to Claim 73, further comprising an output step of outputting a pattern having [a weight corresponding to the input weight information] the input weight, based on the outline data [generated in said generating step] obtained in said converting step.

SUB X3
C3
C3 CMK

75. (Amended) The outline forming method according to Claim 74, wherein said output step includes outputting the outline data [generated in said generating step] obtained in said converting step to a printer.

SUB X3
C3 CMK

80. (Amended) A computer readable medium storing computer program code for controlling an apparatus which stores pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a [path] curve of second degree or more on which the first

~~outline point moves to a second outline point of a pattern having a second weight, said program code comprising:~~

~~input process procedure code for inputting weight [information] of a pattern;~~

~~[moving process procedure code for moving the first outline point based on the weight information input by said input process code and the stored vector information to obtain a position of a third outline point;] and~~

~~[generating process procedure code for generating outline data corresponding to a pattern having a weight indicated by the input weight information based on coordinate of the third outline point]~~

~~converting procedure code for converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector information.~~

Please add Claims 81-105 as follows:

~~--81. The outline forming apparatus according to Claim 66, further comprising sending means for sending coordinate data corresponding to the third outline point, obtained by said converting means.~~

Sub H4

82. The outline forming apparatus according to Claim 66, wherein the vector information includes vector data indicating a straight line.

Cat cont

83. The outline forming method according to Claim 73, further comprising the step of sending coordinate data corresponding to the third outline point, obtained in said converting step.

Sub X5

84. The outline forming apparatus according to Claim 73, wherein the vector information includes vector data indicating a straight line.

85. An outline forming apparatus comprising:
storing means for storing pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a path on which the first outline point moves to a second outline point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight;
input means for inputting weight of a pattern;

obtaining means for obtaining vector data based on
the change information and the input weight;
converting means for converting the coordinate data
corresponding to the first outline point into coordinate data
corresponding to a third outline point of a pattern having
the input weight based on the vector data obtained by said
obtaining means.

86. The outline forming apparatus according to
Claim 85, wherein the pattern represents a character pattern.

C4 Cmt
Sub H6

87. The outline forming apparatus according to
Claim 85, wherein the first weight is a minimum weight and
the second weight is a maximum weight.

88. The outline forming apparatus according to
Claim 85, wherein the vector information includes vector data
indicating a straight line and vector data indicating a curve
of second degree or more.

89. The outline forming apparatus according to
Claim 85, further comprising output means for outputting a
pattern having the input weight, based on coordinate data
corresponding to the third outline point generated by said
converting means.

SUB
X1

90. The outline forming apparatus according to
Claim 89, wherein said output means includes a printer.

91. The outline forming apparatus according to
Claim 85, wherein said converting means converts coordinate
data when vector data for the input weight exists.

92. The outline forming apparatus according to
Claim 85, wherein said storing means stores degree
information indicates degree of a function represented by
each of the plurality of vector data.

C4
Cont

93. The outline forming apparatus according to
Claim 92, wherein the degree information includes information
indicating that coordinate data does not change in
conjunction with weight.

94. The outline forming apparatus according to
Claim 85, wherein the change information indicates a weight
value at which the vector data is changed.

95. An outline forming method utilizing storing
means for storing pattern data which includes coordinate data
corresponding to a first outline point of a pattern having a
first weight, and vector information corresponding to the
first outline point, the vector information indicating a path
on which the first outline point moves to a second outline

Sub H7

point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight, said method comprising the steps of:

inputting weight of a pattern;

obtaining vector data based on the change information and the input weight;

converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector data obtained in said obtaining step.

C4 Cmt

96. The outline forming method according to Claim 95, wherein the pattern represents a character pattern.

97. The outline forming method according to Claim 95, wherein the first weight is a minimum weight and the second weight is a maximum weight.

Sub H8

98. The outline forming method according to Claim 95, wherein the vector information includes vector data indicating a straight line and vector data indicating a curve of second degree or more.

Sub Hs

99. The outline forming method according to Claim 95, further comprising the step of outputting a pattern having the input weight, based on coordinate data corresponding to the third outline point generated in said converting step.

100. The outline forming method according to Claim 99, wherein said output step includes outputting the outline data generated in said converting step to a printer.

Sub Ha

101. The outline forming method according to Claim 95, wherein said converting step includes converting coordinate data when vector data for the input weight exists.

X4 Cm

102. The outline forming method according to Claim 95, wherein said storing means includes storing degree information indicates degree of a function represented by each of the plurality of vector data.

103. The outline forming method according to Claim 102, wherein the degree information includes information indicating that coordinate data does not change in conjunction with weight.

104. The outline forming method according to Claim 95, wherein the change information indicates a weight value at which the vector data is changed.

Sub X9

105. A computer readable medium storing computer program code for an outline forming process which utilizes stored pattern data which includes coordinate data corresponding to a first outline point of a pattern having a first weight, and vector information corresponding to the first outline point, the vector information indicating a path on which the first outline point moves to a second outline point of a pattern having a second weight, the vector information including a plurality of vector data which indicate a plurality of different lines comprising the path and the vector information including change information indicating which vector data is to be used for each weight, said program code comprising:

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input process procedure code for inputting weight of a pattern;

obtaining process procedure code for obtaining vector data based on the change information and the input weight;

converting process procedure code for converting the coordinate data corresponding to the first outline point into coordinate data corresponding to a third outline point of a pattern having the input weight based on the vector data obtained by said obtaining process procedure code.--